# **EAST Search History**

	Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
	L1	303	(frequencies or frequency or rate\$1) NEAR4 (order\$3) NEAR4 (part\$1 or product\$1 or merchandise or item\$1) NEAR4 (decreas\$3 or drop\$1 or dropping or lower\$3 or obsolete or obsolescense or (end NEAR2 life))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/05/22 12:36
	L2	252	1 AND (reason\$3 or season\$5 or temporar\$3 or caus\$3 or categor\$6)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/05/22 12:33
Kuto	ß	24	1 SAME (reason\$3 or season\$5 or temporar\$3 or caus\$3 or categor\$6)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/05/22 12:33
	L4	324	(frequencies or frequency or rate\$1) NEAR4 (order\$3) NEAR4 (part\$1 or product\$1 or merchandise or item\$1) NEAR4 (fall\$3 decreas\$3 or drop\$1 or dropping or lower\$3 or obsolete or obsolescense or (end NEAR2 life))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/05/22 12:36
	L5	52	4 SAME (threshold\$1 or level\$1 or predetermined or preestablished)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/05/22 12:37
lung	16	52〉	4 SAME (threshold\$1 or level\$1 or predetermined or preestablished or preset)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/05/22 14:44

5/22/06 2:44:43 PM Page 1

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decide end-of-life product order frequency Search

Results 1 - 10 of about 108,000 for decide end-of-life product order frequency. (0.24 seconds)

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Wireless Point-to-Point Troubleshooting FAQs and Checklist [Cisco ... END-OF-SALE AND END-OF-LIFE PRODUCTS · CISCO WT2700 WIRELESS SUITE ... In order to change the frequency of your system, swap the transmit and receive ... www.cisco.com/en/US/products/hw/wireless/ ps2360/products\_qanda\_item09186a00801d29ff.shtml - 28k - Cached - Similar pages

### [PDF] GUIDANCE DOCUMENT

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The contribution (fee) varies according to the product type in order to guarantee ...

Consumers discard their end-of-life products at appropriate collection ...

www.buyusa.gov/europeanunion/ weeeforumtakebackoption.pdf - Similar pages

## IPDFI i2 Markdown Price Optimizer

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manage prices for end-of-life items, products with ... dations in order to profitably clear out

inventory within, a specific period. ...

www.i2.com/assets/pdf/PDS\_ markdown\_price\_opt\_v61\_pds7229\_0105.pdf - Similar pages

# [PDF] What three to five issues do you believe are the most important ...

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8. Hospice and end-of-life care. IV. The following housing related concerns were

mentioned. In order of frequency cited they ...

www.whcoa.gov/about/des events reports/PER ND 07 20 05.pdf - Similar pages

# [PDF] DESIGN FOR ENVIRONMENT: A METHOD FOR FORMULATING PRODUCT END-OF ...

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strategy for end-of-life treatment of products is necessary in order to gain ... themselves

decide end-of-life treatment based on external circumstances and ...

www.productstewardship.us/ supportingdocs/DfEMethodforStrategies.pdf - Similar pages

### [PDF] Recovering value from "End-of-Life" Equipment

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understanding of the product recovery process in order to build arguments to support

the ... decide upon the most profitable option for a given product ...

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recycler to decide whether it is economical to disassemble the end-of-life product and

retrieve that, particular component for reuse, or to recycle it for ...

www.ifm.eng.cam.ac.uk/automation/ publications/w papers/cam-autoid-wh017.pdf -

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and safely dispose of pr ducts at end-of-life, it is required by systems manufacturers. and

their suppliers in order to respond to the growing number of ...

www.cmap.ca/open/PDFS\_Word\_files/ NEMI%202002%20Research%20Needs.pdf -

Similar pages

### Mitsubishi Digital Electronics America, Inc.

These include:; specific requests initiated by you using online feedback to our Customer

Service; critical product information (End of Life notices, ...

http://www.google.com/search?hl=en&lr=&rls=GGLD%2CGGLD%3A2004-30%2CGGLD%3Aen&q=dec... 5/22/06

www.mitsubishi-tv.com/privacy/default.asp - 36k - Cached - Similar pages

[PDF] COMMISSION OF THE EUROPEAN COMMUNITIES Brussels, 07.02.2001 COM ...

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giving incentives to consumers to return **end-of-lif pr ducts** such as deposit-refund ... In **order** to improve the life cycle performance of a **pr duct**, ...

europa.eu.int/eur-lex/en/ com/gpr/2001/com2001\_0068en01.pdf - Similar pages

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end-of-life product order rate

1980 - 2001 Search Advanced Scholar Searc Scholar Preferences Scholar Help

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Results 1 - 10 of about 2,180 for end-of-life product order rate. (0.44 seconds)

How product characteristics determine end-of-life strategies - group of 6 »

All articles Recent articles

CM Rose, K Ishii, K Masui - Electronics and the Environment, 1998. ISEE-1998. ..., 1998 ieeexplore.ieee.org

... trade-in possibilities: reimbursement policy for returning end-of-life products. ... 850 series as a product made with ... friendly vacuum in order to differentiate ...

Cited by 19 - Web Search

# DESIGN FOR ENVIRONMENT: A METHOD FOR FORMULATING PRODUCT END-OF-LIFE

STRATEGIES - group of 4 »

CM Rose - 2000 - mml.stanford.edu

... products are being disposed of at higher rates ... substances for electronic products

is critical because ... a crucial research subject - end-of-life treatment of ...

Cited by 19 - View as HTML - Web Search

An international comparison of product end-of-life scenarios and legislation for consumer ... - group of 5 »

C Bok, J Nilsson, K Masui, K Suzuki, C Rose, BH ... - Electronics and the Environment, 1998. ISEE-1998. ..., 1998 ieeexplore.ieee.org

... In order to develop successful products that cause a ... Recovery rates vary from facility

to facility ... End-of- life products are often sent abroad for either reuse ...

Cited by 13 - Web Search

A Multi-Objective Methodology for Evaluating Product End-of-Life Options and Disassembly

SGI Lee, SWI Lye, MKI Khoo - The International Journal of Advanced Manufacturing ..., 2001 - Springer

... In order to determine the extent to which a product should be ... Two end-of-life

disassembly charts are introduced showing the impact on the environment and ... Cited by 9 - Web Search - BL Direct

### Disposition and End-of-Life Options for Personal Computers - group of 13 »

HS Matthews, S Park - Contact, 1997 - aix.meng.auth.gr

... Thus storing is merely an activity which the user does in order to potentially ...

"Disposition and End-of-Life Options for ... 3. Implications for Product Takeback ...

Cited by 18 - View as HTML - Web Search

### A methodology for modeling and adaptive planning of disassemblyprocesses

E Zussman, M Zhou - Robotics and Automation, IEEE Transactions on, 1999 - ieeexplore.ieee.org

... D, if F = P 0, the **product** is completely ... problem is to determine the best **order** 

of disassembly ... p without further dis- assembly, an End-Of-Life (EOL) value ...

Cited by 42 - Web Search - BL Direct

### Reverse-Logistics Strategy for Product Take-Back - group of 5 »

M Klausner, CT Hendrickson - Interfaces, 2000 - extenza-eps.com

... turned in case of pickup of a box of end- of-life products. ... exam- ple, the unit cost

for single-product pickup of ... parcel service would be on the order of \$2.70 ...

Cited by 26 - Web Search - BL Direct

## Uncertain Medical Expenses and Precautionary Saving Near the End of the Life Cycle - group of 7 »

MG Palumbo - The Review of Economic Studies, 1999 - JSTOR

... In order to choose consumption optimally in period t ... by applying the Kaplan-Meier

estimator for survival rates. ... during the current year is the product of the ...

Cited by 59 - Web Search - BL Direct

# Kinetics and mechanisms of the low-temperature degradation of cellulose

AMR Emsley, GCR Stevens - Cellulose, 1994 - Springer ... In **order** to be able to predict insulation ... estimate insulation life, and degradation **products**, such as CO ... The degradation **rat** is significantly influenced by the ... Cited by 24 - Web Search

Design and implementation of an adaptive process planner for disassembly processes E Zussman, MC Zhou - Robotics and Automation, IEEE Transactions on, 2000 - ieeexplore.ieee.org ... We term this multipurpose goal as "increasing the nd-of-life (EOL) value ... to maximize the EOL value of a product by finding the rder of disassembly ... Cited by 21 - Web Search - BL Direct

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decrease product order rate seasonality

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1980

<u>Financial Panics, the Seasonality of the Nominal Interest Rate, and the Founding</u> All articles Recent articles of the Fed - group of 3 »

JA Miron - The American Economic Review, 1986 - JSTOR ... 3The share of agriculture in Gross Domestic **Product** fell from 24 ... hypothesis that the Fed caused the **decrease** in both ... at pref- erential **rates** in **order** to assure ... Cited by 61 - Web Search

The Kinetics of Bacteriolysis in the Gut of the Deposit Feeder Arenicola marina - group of 5 »

CJ Plante, LM Mayer, GM King - Applied and Environmental Microbiology, 1996 - aem.asm.org ... approximated by a zero- **order** kinetic equation. ... time as substrate utilization **decreased** inhibition, clearly implicating substrate rather than **product** inhibition ... Cited by 5 - Web Search - BL Direct

<u>Information enrichment: designing the supply chain for competitive advantage R. Mason-Jones, DR ...</u> - group of 3 »

R Mason-Jones - Supply Chain Management: An International Journal, 1997 - emeraldinsight.com ... in the fight to **decrease** lead-times ... chains encountered in the electronics **products** industry (Berry ... The factory **order rate** responses for increasing information ... Cited by 58 - Web Search

# A Multivariate Analysis of Interest Rate Seasonality at the Time of the Founding of the Federal ... - group of 2 »

CM Chambers, JS Fackler - Southern Economic Journal, 1995 - questia.com ... In **order** to further study this shift, stability tests ... for industrial production show a **decrease** in **seasonality** ... the interest **rate** equation is the **product** of the ... Cited by 1 - Web Search - BL Direct

<u>Seasonal variation in sulfate reduction and methanogenesis in peaty sediments of eutrophic Lake ...</u> - group of 3 »

AJCN Sinke, AAN Cornelese, TEN Cappenberg, AJBN ... - Biogeochemistry, 1992 - Springer ... the sediment which indicated a rapid **decrease** of degradable ... nitrogen-filled glove box (Coy Laboratory **Products** Inc ... as the ratio of the first **order** reaction **rate** ... Cited by 15 - Web Search

Optimal material control in an assembly system with component commonality - group of 3 »

N Agrawal, MA Cohen - Naval Research Logistics, 2001 - doi.wiley.com ... focus is on measuring delivery service for orders of the finished **product**. The specific metric that we use is the **Order** Completion **Rate** (OCR), which ... Cited by 15 - Web Search - BL Direct

Seasonality in estuarine sources of methylated arsenic

UK PLA8AA - APPLIED ORGANOMETALLIC CHEMISTRY, 1993 - doi.wiley.com ... 3 At the higher temperature, the zero-order rate of appearance ... rate is similar to the rate of release ... small decrease in total dissolved inorganic arsenic (from ... Web Search

Seasonal variation in cell volume of epilimnetic bacteria - group of 4 »

THE Chrzanowski, RDE Crotty, GJE Hubbard - Microbial Ecology, 1988 - Springer
... a regression model fitting a second ord r polynomial (normally ... Since biomass is the partial product of abundance ... Cells grown at tt = 0.194 decreased 31% when ...

Cited by 9 - Web Search

## Seasonality in employment - group of 3 »

K Marshall - Perspectives on Labour and Income, 1999 - ivt.crepuq.qc.ca ... In order to view the full extent of overall ... The pr duct of these two factors, weighted seasonal variation ... In addition, employment rates have decreased for young ... Cited by 6 - View as HTML - Web Search

Nonshivering thermogenesis and cold resistance during seasonal acclimatization in the Djungarian ... GV Heldmaier, SV Steinlechner, JV Rafael - Journal of Comparative Physiology B: Biochemical, Systemic, ..., 1982 - Springer ... T, caused a decline in Tb followed by a **decrease** in I ... 3), therefore, we added this amount of metabolic **rate** to the measured NST maximum in **order** to obtain ... Cited by 42 - Web Search

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# Structure of the 8200-Year Cold Event Revealed by a Speleothem Trace Element All articles Recent articles Record - group of 5 »

JUL Baldini, F McDermott, IJ Fairchild - J. Phys. Chem. A, 2000 - Ideo.columbia.edu ... monthly) record, antipathetic second-order oscillations in phosphorus and strontium reveal decreased growth rates and increased rainfall seasonality. ... Cited by 51 - View as HTML - Web Search - BL Direct

# Financial Panics, the Seasonality of the Nominal Interest Rate, and the Founding of the Fed - group of 3 »

JA Miron - The American Economic Review, 1986 - JSTOR

... Markets The hypothesis that the Fed caused the decrease in both the ... bills backed

by agricultural commodities at pref- erential rates in order to assure ...

Cited by 61 - Web Search

# A three-dimensional global model investigation of seasonal variations in the atmospheric burden of ... - group of 7 »

P Kasibhatla, WL Chameides, J St John - Journal of Geophysical Research. D. Atmospheres, 1997 - nicholas.duke.edu ... converting SO 2 to SO 4 in the boundary layer with a pseudo first-order rate of constant of 1 ... to simultaneously simulate the large seasonal cycle in surface SO ... Cited by 36 - View as HTML - Web Search - BL Direct

# <u>Seasonal variation in sulfate reduction and methanogenesis in peaty sediments of eutrophic Lake ...</u> - group of 3 »

AJCN Sinke, AAN Cornelese, TEN Cappenberg, AJBN ... - Biogeochemistry, 1992 - Springer ... cm depth in the sediment which indicated a rapid **decrease** of degradable ... constant is defined as the ratio of the first **order** reaction **rate** constant for ... Cited by 15 - Web Search

# Decline of infant and child mortality rates in rural Senegal over a 37-year period (1963–1999) - group of 5 »

V Delaunay, JF Etard, MP Préziosi, A Marra, F ... - International Journal of Epidemiology, 2001 - ije.oupjournals.org ... Seasonality In order to compare the monthly distribution of ... factors should be considered

for future **decrease** in mortality ... Constant annual **rate** of decline in the ...

Cited by 19 - Web Search - BL Direct

# Seasonal trends in body mass, food intake and resting metabolic rate, and induction of metabolic ... - group of 3 »

EF Fuglei, NAF Øritsland - Journal of Comparative Physiology B: Biochemical, Systemic, ..., 1999 - Springer ... In **order** to ensure that RMRs were measured under post ... A 30% **decrease** in BM was set as a criteria for ... fat con- tent on the expected metabolic **rate** according to ... Cited by 27 - Web Search - BL Direct

# Seasonality in basal metabolic rate and thermal conductance in a long-distance migrant shorebird, ... - group of 2 »

TD Piersma, ND Cadée, SD Daan - Journal of Comparative Physiology B: Biochemical, Systemic, ..., 1995 - Springer ... were set in the same ascending **order** every night ... shows that the Scholander- model [a linear **decrease** in SMR ... 3 **Seasonal** changes in basal metabolic **rate** (top row ... Cited by 30 - Web Search - BL Direct

# Seasonal variation in suicides: diminished or vanished - group of 4 »

P YIP, A CHAO, C CHIU, A Method - The British Journal of Psychiatry, 2000 - bjp.rcpsych.org ... In **order** to examine the possible determinant **order** to examine ... **decrease** among the reasons for the **decrease** among the ... time of the year unemployment **rate** at that ... Cited by 24 - Web Search - BL Direct

... Wage and Teenage Employment: A Reanalysis with Attention to Serial Correlation and S asonality G Solon - The Journal of Human Resources, 1985 - JSTOR

... 1 297 described by the first-**order** autoregressive model ... in the minimum wage (or its coverage **rate**) is associated with about a 1 percent **decr ase** in teenage ... Cited by 10 - Web Search

... of the mouse opossum (Thylamys elegans) in semi-arid Chile: seasonality, feedback structure and ... - group of 3 »

M Lima - Proceedings of the Royal Society B: Biological Sciences, 2001 - journals.royalsoc.ac.uk

... Finally, the monthly adult survival **rate** is given by S ad . In **order** to account for the **seasonal** variation in demo- graphy (if documented in the demographic ... Cited by 9 - Web Search - BL Direct

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#### Life-Cycle Energy, Costs, and Strategies for Improving a Single-Family House -All articles Recent articles group of 4 »

GA Keoleian, S Blanchard, P Reppe - Journal of Industrial Ecology, 2001 - MIT Press ... glazing area had a poor payback due to the ... caused by marginal reductions in electricity demand as more ... A schedule was developed to determine the contributions ... Cited by 8 - Web Search - BL Direct

# [воок] The Looming Epidemic: Impact of HIV and AIDS in India

P Godwin - 1998 - books.google.com

... However, if in fact India currently has several million ... will be systems costs of prevention, as well as higher costs of health care due to increased demand. ... Cited by 9 - Web Search - Library Search

# IEEE Guide for Assessing, Monitoring, and Mitigating Aging Effects of Class 1E Equipment Used in ... group of 2 »

TOC View - IEEE Std 1205-2000, 2000 - ieeexplore.ieee.org

... involving stressor intensity and time; however, aging degradation due to a ... its service conditions (stressors) should be applied to determine if any significant ... Web Search

# Early Results and Field Tests of an Information Monitoring and Diagnostic System for Commercial ... group of 6 »

MA Piette, S Khalsa, P Rumsey, KL Kinney, EL Lee, ... - prepared for the California Energy Commission and the ..., 1998 eande.lbl.gov

... M/yr statewide, plus additional peak demand savings. ... they agreed to provide specific names if the list ... To determine which individuals at the selected companies ... Cited by 4 - View as HTML - Web Search

### Health Cost Management (HCM) Strategies for Health Promotion Programs

R Abstracts - Health, 2001 - summex.com

... Due to the labor shortages of the past several ... Health plans, if regulated by state insurance commissioners, can ... descriptions about each of the demand-side HCM ... View as HTML - Web Search

# Maternal Expectations and Ex Post Rationalizations: The Usefulness of Survey Information on the ....

MR Rosenzweig, KI Wolpin - The Journal of Human Resources, 1993 - JSTOR ... It is not, however, possible to determine how much the ... of future children will increase or decrease wantedness of ... If the principal source of variability is in ...

Cited by 14 - Web Search - BL Direct

#### FORWARD! - group of 7 »

SM Report - Retrieved November 20, 2004, from www. denver. ..., 2000 - asat.com ... subject to cyclical downturns and price and demand volatility in ... If we cannot generate sufficient cash to service our ... holders of the 9.25% senior notes due 2011 ... Cited by 1 - Web Search

### [воок] A Minister's Handbook of Mental Disorders

JW Ciarrocchi - 1993 - books.google.com

... seen in min- istry; 2) to determine when referral to ... If not totally ignored, the religion professional may be ... clergy may expect and even demand dialogue with ... Cited by 4 - Web Search - Library Search

# [воок] Successful Product Development: Speeding from Opportunity to Profit

MD Rosenau - 1999 - books.google.com

... Reduce warranty returns and expenses •Decr ase customer service ... Figure 1-2. Adoption barrier due to user's expectation ... they have a good process if they have ... Cited by 8 - Web Search

Optimizing the supply chain in reverse logistics - group of 3 »

P VEERAKAMOLMAL, SM GUPTA - GUPTA, SM Environmentally Concious Manufacturing, 2001 - coe.neu.edu ... the value of returned products may decrease more rapidly ... Set t = 1. Step 2: Determine the maximum yield ... the demand of remanufactured products, if the assembly ... Cited by 2 - View as HTML - Web Search - BL Direct

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JW Jones - Personal, Indoor and Mobile Radio Communications, 1992. .... 1992 ieeexplore.ieee.org

... ensure priority access for safety services including, if necessary, pre ... by the solid line), with Saturday and Sunday demand slightly lower (dotted lines ...

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# Early Results and Field Tests of an Information Monitoring and Diagnostic System for Commercial ... -

MA Piette, S Khalsa, P Rumsey, KL Kinney, EL Lee, ... - prepared for the California Energy Commission and the ..., 1998 eande.lbl.gov

... of the subjects from our initial interviews to determine the best ... information, but

the source of information is much lower quality if the engineering ...

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GA Keoleian, S Blanchard, P Reppe - Journal of Industrial Ecology, 2001 - MIT Press ... painting) neutralized the original lower pre- use ... Other factors that determine annual natural gas heating ... marginal reductions in electricity demand as more ... Cited by 8 - Web Search - BL Direct

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... involving stressor intensity and time; however, aging degradation due to a ... its service conditions (stressors) should be applied to determine if any significant ... Web Search

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P Godwin - 1998 - books google.com

... However, if in fact India currently has several million ... will be systems costs of prevention, as well as higher costs of health care due to increased demand. ... Cited by 9 - Web Search - Library Search

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MR Rosenzweig, KI Wolpin - The Journal of Human Resources, 1993 - JSTOR ... It is not, however, possible to determine how much ... Similarly, if the principal source of variability in the ... and further that child investment is lower for more ... Cited by 14 - Web Search - BL Direct

# Health Cost Management (HCM) Strategies for Health Promotion Programs

R Abstracts - Health, 2001 - summex.com

... health plan vendor(s) based on lower premium quotes ... Health plans, if regulated by state insurance commissioners ... descriptions about each of the demand-side HCM ... View as HTML - Web Search

# [воок] Value Nets: Breaking the Supply Chain to Unlock Hidden Profits - group of 2 »

D Bovet, J Martha - 2000 - books.google.com

... If not, the door of opportunity is open to others. ... source ofthat problem was

consistently poor demand forecasting ... who had plenty ofnew machines at I wer prices ...

Cited by 69 - Web Search - Library Search

## FORWARD! - group of 7 »

SM Report - Retrieved November 20, 2004, from www. denver. ..., 2000 - asat.com ... If we cannot generate sufficient cash to ... over-capacity and declining demand and reduced ... reflecting inventory corrections and I wer demand experienced in their ... Cited by 1 - Web Search

[воок] Successful Product Development: Speeding from Opportunity to Profit MD Rosenau - 1999 - books.google.com

... Figure 1-2. Adoption barrier **due** to user's expectation ... that they have a good process **if** they have ... overlooking the possible disap -pointment of **lower** sales than ... Cited by 8 - Web Search

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A model for determining price markdowns of seasonal merchandise - group of 3 » All articles

J Walker - Journal of Product and Brand Management, 1999 - emeraldinsight.com
... toys, personal computers and seasonal merchandise, especially that ... 352 JOURNAL OF

PRODUCT & BRAND MANAGEMENT, VOL. ... inventory, which may be obsolete, will sell ...

Web Search - BL Direct

The Bass New Product Growth Model: A Sensitivity Analysis for a High Technology Product D Tigert, B Farivar - Journal of Marketing, 1981 - JSTOR

... size range of 12-20,000 square feet became **obsolete**. ... data (not shown) exhibited a strong **seasonality** pattern with ... L pattern The Bass New **Product** Growth Model ... Cited by 10 - Web Search

The New Monetary Aggregates: A Critical Appraisal - group of 2 »

NG Berkman - Journal of Money, Credit and Banking, 1980 - JSTOR

... render several of the proposed aggregates obsolete argue against their immediate adoption. Part 2 extends the board staff analysis of seasonal and transitory ...

Web Search

Seasonality, leading indicators, and alternative business cycle theories - group of 4 »

JM WELLS - Applied Economics, 1999 - Taylor & Francis
... This may be due, in part, to the special nature ... better than the actual index, its

seasonal movements probably ... indi- cators of today may become obsolete in the ...

Cited by 1 - Web Search - BL Direct

Evolutionary Biogeography - group of 2 »

H Ouellet - Ecology, 1988 - JSTOR

... only partly valid and for the most **part obsolete**. ... The greater **part** of the titles cited are ... role of interactions between environmental **seasonality** and trophic ... Web Search

<u>A Revision of Mesoamerican Psychotria Subgenus Psychotria (Rubiaceae), Part I: Introduction and ...</u> - group of 2 »

CW Hamilton - Annals of the Missouri Botanical Garden, 1989 - JSTOR ... the Mapouria generic concept makes that genus **obsolete**. ... 8d-0. This is **part** of an incompatibility ... mountainous climates may show some **seasonality** of rainfall ... Cited by 8 - Web Search

Symptom control in patients with hay fever in UK general practice: how well are we doing and is ... - group of 3 »

P WHITE, H SMITH, N BAKER, W DAVIS, A FREW - Clinical and Experimental Allergy, 1998 - ingentaconnect.com ... level of morbidity associated with **seasonal** allergic rhinitis in ... especially the continued use of **obsolete** sedat- ing ... drug, or who purchase all or **part** of their ... Cited by 13 - Web Search - BL Direct

<u>Information enrichment: designing the supply chain for competitive advantage R. Mason-Jones, DR ...</u> - group of 3 »

R Mason-Jones - Supply Chain Management: An International Journal, 1997 - emeraldinsight.com ... time the required **pr duct** may actually be **bsolete**. ... of information transfer and subsequent **product** delivery the ... randomly or in a trend such as **seasonality**. ... Cited by 58 - Web Search

Trouble Spotting: Assessing the Likelihood of a Turnaround

http://scholar.google.com/scholar?hl=en&lr=&q=seasonality+obsolete+%28product+OR+part+OR+item+O... 5/22/06

D DiNapoli, E Fuhr - Workouts & Turnarounds II, Global Restructuring Strategies ..., 1999 - media.wiley.com ... effort to manage the key business drivers identified as **part** of the ... but the company minimizes an investment in a **pr duct** which may becoming **bsolete** as new ... Cited by 1 - View as HTML - Web Search

Lean production in a changing competitive world: a Japanese perspective - group of 3 »

H Katayama, D Bennett - International Journal of Operations & Production Management, 1996 - emeraldinsight.com ... annoyed by the fact that new goods become bs lete almost as ... policy is to offer a wide and distinct pr duct range ... plant D it is due to the seasonality of sales ...

Cited by 26 - Web Search - BL Direct

Goodoodoogle ►
Result Page: 1 2 3 4 5 6 7 8 9 10 Next

seasonality obsolete (product OR pa Search

Google Home - About Google - About Google Scholar

©2006 Google

Dialog

```
Your SELECT statement is:
    s (((low-order-rate-(part or parts)) or (low()order()rate()(part or
parts))) and (forecast? or predict? or (probability()distribution? ?))) not
py>2001
```

Items File ----Examined 50 files Examined 100 files Examined 150 files Processing Processing Processing Examined 200 files Examined 250 files Examined 300 files Examined 350 files Examined 400 files Processing Examined 450 files Examined 500 files Examined 550 files Processing

No files have one or more items; file list includes 560 files. One or more terms were invalid in 105 files.

Drawg

```
Set
        Items
                Description
S1
           81
                 ((PROBABILITY()DISTRIBUTION? ?)(5N)(RATE OR RATES OR FREQU-
             ENC???) (5N) (DEMAND? ? OR ORDER? ? OR PURCHAS???)) NOT PY>2001
           44
                    (unique items)
                RD
            -3
                S2 AND (THRESHOLD OR MINIMUM)
            0
                S2 AND INVENTOR$3
S5.
            В
                S2 AND INVENTOR?
            1
                S5 AND (MONTE()CARLO)
       <del>2:</del>INSPEC 1898-2006/May W3
         (c) 2006 Institution of Electrical Engineers
File
       6:NTIS 1964-2006/May W3
         (c) 2006 NTIS, Intl Cpyrght All Rights Res
File
       7:Social SciSearch(R) 1972-2006/May W4
         (c) 2006 Inst for Sci Info
File
       8:Ei Compendex(R) 1970-2006/May W3
         (c) 2006 Elsevier Eng. Info. Inc.
File
      11:PsycINFO(R) 1887-2006/Apr W4
         (c) 2006 Amer. Psychological Assn.
File
      14: Mechanical and Transport Engineer Abstract 1966-2006/May
         (c) 2006 CSA.
File
      15:ABI/Inform(R) 1971-2006/Jun 01
         (c) 2006 ProQuest Info&Learning
      28:Oceanic Abstracts 1966-2006/Apr
File
         (c) 2006 CSA.
      34:SciSearch(R) Cited Ref Sci 1990-2006/May W4
File
         (c) 2006 Inst for Sci Info
      35:Dissertation Abs Online 1861-2006/May
File
         (c) 2006 ProQuest Info&Learning
File
      36:MetalBase 1965-20060601
         (c) 2006 The Thomson Corporation
File
      40:Enviroline(R) 1975-2006/Apr
File
      47: Gale Group Magazine DB(TM) 1959-2006/May 31
         (c) 2006 The Gale group
File
      50:CAB Abstracts 1972-2006/Apr
         (c) 2006 CAB International
File
      56: Computer and Information Systems Abstracts 1966-2006/May
         (c) 2006 CSA.
      57: Electronics & Communications Abstracts 1966-2006/May
File
         (c) 2006 CSA.
File
      61:Civil Engineering Abstracts. 1966-2006/May
         (c) 2006 CSA.
File
      62:SPIN(R) 1975-2006/Mar W4
         (c) 2006 American Institute of Physics
File
      63: Transport Res(TRIS) 1970-2006/Apr
         (c) fmt only 2006 Dialog
File
      64: Environmental Engineering Abstracts 1966-2006/May
         (c) 2006 CSA.
File
      68:Solid State & Superconductivity Abstracts 1966-2006/May
         (c) 2006 CSA.
File
      73:EMBASE 1974-2006/Jun 01
         (c) 2006 Elsevier Science B.V.
File
      88:Gale Group Business A.R.T.S. 1976-2006/May 24
         (c) 2006 The Gale Group
File
      94:JICST-EPlus 1985-2006/Feb W4
         (c) 2006 Japan Science and Tech Corp(JST)
File
      96:FLUIDEX 1972-2006/May
         (c) 2006 Elsevier Science Ltd.
File 103: Energy SciTec 1974-2006/Apr B2
         (c) 2006 Contains copyrighted material
File 122: Harvard Business Review 1971-2006/May
         (c) 2006 Harvard Business Review
```

File 134:Earthquake Engineering Abstracts 1966-2006/May (c) 2006 CSA.
File 144:Pascal 1973-2006/May W1 (c) 2006 INIST/CNRS

?

Dalog

Your SELECT statement is:

s (((probability()distribution? ?)(5n)(rate or rates or frequenc???)(5n)(demand? ? or order? ? or purchas???)) and (inventory or inventories)) not py>2001

```
Items
                 File
                    2: INSPEC 1898-2006/May W3
                    7: Social SciSearch(R) 1972-2006/May W4
                    8: Ei Compendex(R)_1970-2006/May W3
                    15: ABI/Inform(R) 1971-2006/Jun 01
                    34: SciSearch(R) Cited Ref Sci 1990-2006/May W4
                    35: Dissertation Abs Online 1861-2006/May
       Examined 50 files
                   88: Gale Group Business A.R.T.S. 1976-2006/May 24
                  122: Harvard Business Review 1971-2006/May
       Examined 100 files
                 148: Gale Group Trade & Industry DB 1976-2006/May 31
       Examined 150 files
Processing
Processing
       Examined 200 files
       Examined 250 files
       Examined 300 files
              1 485: Accounting & Tax DB 1971-2006/May W3
       Examined 350 files
       Examined 400 files
Processing
       Examined 450 files
       Examined 500 files
       Examined 550 files
Processing
```

10 files have one or more items; file list includes 560 files. One or more terms were invalid in 105 files.

```
s (((cause? ? or reason? ?)(5n)(decreas? or low or lower? or slump? or
drop?)(5n)(order? ? or sales)) and (monte()carlo)) not py>2001
           Items
                    File
                     2: INSPEC 1898-2006/May W3
               4
                     8: Ei Compendex(R) 1970-2006/May W3
Processing
                     33: Aluminium Industry Abstracts_1966-2006/May 34: SciSearch(R) Cited Ref Sci_1990-2006/May W3
               1
                3
                     36: MetalBase_1965-20060601
                     62: SPIN(R)_{1975-2006/Mar W4}
               1
       Examined 50 files
                     75: TGG Management Contents(R) 86-2006/May W3
                     88: Gale Group Business A.R.T.S. 1976-2006/May 24 95: TEME-Technology & Management 1989-2006/May W4
                    103: Energy SciTec 1974-2006/Apr B2
       Examined 100 files
                    144: Pascal_1973-2006/May W1
                    148: Gale Group Trade & Industry DB 1976-2006/May 31
                    180: Federal Register 1985-2006/Jun 01
       Examined 150 files
Processing
Processing
                    275: Gale Group Computer DB(TM) 1983-2006/May 30
       Examined 200 files
                   348: EUROPEAN PATENTS 1978-2006/ 200622
>>>File 349 processing for LOWER? stopped at LOWERSIDES
                   349: PCT FULLTEXT 1979-2006/UB=20060525, UT=20060518
       Examined 250 files
               1 393: Beilstein Abstracts 2006/Q2
                   440: Current Contents Search(R) 1990-2006/Jun 01
       Examined 300 files
                  484: Periodical Abs Plustext 1986-2006/May W4
       Examined 350 files
Processing
                   545: Investext(R) 1982-2006/Jun 01
       Examined 400 files
               1 633: Phil.Inquirer 1983-2006/May 31
Processing
Processing
                  654: US Pat.Full. 1976-2006/May 30
               6
       Examined 450 files
                   711: Independent (London) Sep 1988-2006/May 31
               1
       Examined 500 files
                   781: ProQuest Newsstand 1998-2006/Jun 01
       Examined 550 files
Processing
Processing
Processing
                    996: NewsRoom 2000-2001
   25 files have one or more items; file list includes 560 files.
   One or more terms were invalid in 107 files.
```

Your SELECT statement is:

```
Set
               Items
                        Description
       S1
                   73
                        (((CAUSE? ? OR REASON? ?)(5N)(DECREAS? OR LOW OR LOWER? OR
                     SLUMP? OR DROP?) (5N) (ORDER? ? OR SALES)) AND (MONTE()CARLO)) -
                     NOT PY>2001
LWIC S2
                   45) RD (unique items)
               2:INSPEC 1898-2006/May W3
                 (c) 2006 Institution of Electrical Engineers
       File
               8:Ei Compendex(R) 1970-2006/May W3
                 (c) 2006 Elsevier Eng. Info. Inc.
       File
             33:Aluminium Industry Abstracts 1966-2006/May
                 (c) 2006 CSA.
       File
             34:SciSearch(R) Cited Ref Sci 1990-2006/May W3
                 (c) 2006 Inst for Sci Info
       File
             36:MetalBase 1965-20060601
                 (c) 2006 The Thomson Corporation
       File
             62:SPIN(R) 1975-2006/Mar W4
                 (c) 2006 American Institute of Physics
       File
             75:TGG Management Contents(R) 86-2006/May W3
                 (c) 2006 The Gale Group
       File
             88: Gale Group Business A.R.T.S. 1976-2006/May 24
                 (c) 2006 The Gale Group
             95:TEME-Technology & Management 1989-2006/May W4
       File
                 (c) 2006 FIZ TECHNIK
       File 103: Energy SciTec 1974-2006/Apr B2
                 (c) 2006 Contains copyrighted material
       File 144: Pascal 1973-2006/May W1
                 (c) 2006 INIST/CNRS
       File 148: Gale Group Trade & Industry DB 1976-2006/May 31
                 (c) 2006 The Gale Group
       File 180: Federal Register 1985-2006/Jun 01
                 (c) 2006 format only DIALOG
       File 275: Gale Group Computer DB(TM) 1983-2006/May 30
                 (c) 2006 The Gale Group
       File 348: EUROPEAN PATENTS 1978-2006/ 200622
                 (c) 2006 European Patent Office
       File 349:PCT FULLTEXT 1979-2006/UB=20060525,UT=20060518
                 (c) 2006 WIPO/Univentio
       File 393:Beilstein Abstracts 2006/Q2
                 (c) 2006 Beilstein GmbH
       File 440: Current Contents Search(R) 1990-2006/Jun 01
                 (c) 2006 Inst for Sci Info
       File 484: Periodical Abs Plustext 1986-2006/May W4
                 (c) 2006 ProQuest
       File 545:Investext(R) 1982-2006/Jun 01
                 (c) 2006 Thomson Financial Networks
       File 633: Phil. Inquirer 1983-2006/May 31
                 (c) 2006 Philadelphia Newspapers Inc
       File 654:US Pat.Full. 1976-2006/May 30
                 (c) Format only 2006 Dialog
       File 711: Independent (London) Sep 1988-2006/May 31
                 (c) 2006 Newspaper Publ. PLC
       File 781: ProQuest Newsstand 1998-2006/Jun 01
                 (c) 2006 ProQuest Info&Learning
       File 996:NewsRoom 2000-2001
                 (c) 2006 Dialog
```

Dalog

```
Your SELECT statement is:
   s ((tameo(2n)yanagino) or (yukihiko(2n)suzaki)) not py>2000
          Items File
          ____
                 ----
      Examined 50 files
      Examined 100 files
      Examined 150 files
      Examined 200 files
                 345: Inpadoc/Fam.& Legal Stat 1968-2006/UD=200621
                 348: EUROPEAN PATENTS_1978-2006/ 200622
      Examined 250 files
>>>File 416: Prefix "PY" is undefined
                 416: Dialog Company Name Finder (TM) 2006/Mar
      Examined 300 files
      Examined 350 files
      Examined 400 files
      Examined 450 files
      Examined 500 files
      Examined 550 files
Processing
```

3 files have one or more items; file list includes 560 files. One or more terms were invalid in 106 files.

Dialog

```
Your SELECT statement is:
   s (((fast or slow or slowly or quick or quickly)(2n)moving(2n)(part??
or product? ? or item? ?)) and (inventory or inventories or stock???) and
(probability()distribution? ?) and (forecast? or predict?)) not py>2001
           Items
                   File
           ____
                   ____
                    15: ABI/Inform(R) 1971-2006/Jun 01
Processing
               1
                    35: Dissertation Abs Online 1861-2006/May
       Examined 50 files
               1
                    75: TGG Management Contents(R) 86-2006/May W3
                   122: Harvard Business Review 1971-2006/May
               1
       Examined 100 files
                   148: Gale Group Trade & Industry DB 1976-2006/Jun 01
       Examined 150 files
Processing
Processing
                   275: Gale Group Computer DB(TM) 1983-2006/May 31
       Examined 200 files
                   340: CLAIMS(R)/US Patent 1950-06/May 30
                   349: PCT FULLTEXT 1979-2006/UB=20060525, UT=20060518
       Examined 250 files
       Examined 300 files
                   484: Periodical Abs Plustext 1986-2006/May W4
       Examined 350 files
       Examined 400 files
Processing
Processing
                   654: US Pat.Full. 1976-2006/May 30
       Examined 450 files
       Examined 500 files
       Examined 550 files
Processing
Processing
Processing
```

10 files have one or more items; file list includes 560 files. One or more terms were invalid in 105 files.

?

Dalog

16 (((FAST OR SLOW OR SLOWLY OR QUICK OR QUICKLY) (2N) MOVING(2-N) (PART? ? OR PRODUCT? ? OR ITEM? ?)) AND (INVENTORY OR INVENTORIES OR STOCK???) AND (PROBABILITY() DISTRIBUTION? ?) AND (FOREAST? OR PREDICT?)) NOT PY>2001  S2 13 RD (unique items)	Set	Items Des	cription	)
TORIES OR STOCK???) AND (PROBABILITY()DISTRIBUTION? ?) AND (F-ORECAST? OR PREDICT?)) NOT PY>2001  S2	S1	16 (((	FAST OR SLOW OR SLOWLY OR QUICK OR QUICKLY) (2N)	MOVING(2-
ORECAST? OR PREDICT?)) NOT PY>2001  S2 13 RD (unique items)  File 15:ABI/Inform(R) 1971-2006/Jun 01				
S2 13 RD (unique items) File 15:ABI/Inform(R) 1971-2006/Jun 01				) AND (F-
(c) 2006 ProQuest Info&Learning File 35:Dissertation Abs Online 1861-2006/May (c) 2006 ProQuest Info&Learning File 75:TGG Management Contents(R) 86-2006/May W3 (c) 2006 The Gale Group File 122:Harvard Business Review 1971-2006/May (c) 2006 Harvard Business Review File 148:Gale Group Trade & Industry DB 1976-2006/Jun 01 (c) 2006 The Gale Group File 275:Gale Group Computer DB(TM) 1983-2006/May 31 (c) 2006 The Gale Group File 340:CLAIMS(R)/US Patent 1950-06/May 30 (c) 2006 IFI/CLAIMS(R) File 349:PCT FULLTEXT 1979-2006/UB=20060525,UT=20060518 (c) 2006 WIPO/Univentio	<b>~</b> 0	ORECAS	T? OR PREDICT?)) NOT PY>2001	
(c) 2006 ProQuest Info&Learning File 35:Dissertation Abs Online 1861-2006/May	-	13 KD	(unique items) — WC	
File 35:Dissertation Abs Online 1861-2006/May (c) 2006 ProQuest Info&Learning  File 75:TGG Management Contents(R) 86-2006/May W3 (c) 2006 The Gale Group  File 122:Harvard Business Review 1971-2006/May (c) 2006 Harvard Business Review  File 148:Gale Group Trade & Industry DB 1976-2006/Jun 01 (c) 2006 The Gale Group  File 275:Gale Group Computer DB(TM) 1983-2006/May 31 (c) 2006 The Gale Group  File 340:CLAIMS(R)/US Patent 1950-06/May 30 (c) 2006 IFI/CLAIMS(R)  File 349:PCT FULLTEXT 1979-2006/UB=20060525,UT=20060518 (c) 2006 WIPO/Univentio	гтте	: 12:ABI/IHIOIM	(R) 19/1-2006/Jun 01	
(c) 2006 ProQuest Info&Learning File 75:TGG Management Contents(R) 86-2006/May W3	File			
File 75:TGG Management Contents(R) 86-2006/May W3 (c) 2006 The Gale Group  File 122:Harvard Business Review 1971-2006/May (c) 2006 Harvard Business Review  File 148:Gale Group Trade & Industry DB 1976-2006/Jun 01 (c) 2006 The Gale Group  File 275:Gale Group Computer DB(TM) 1983-2006/May 31 (c) 2006 The Gale Group  File 340:CLAIMS(R)/US Patent 1950-06/May 30 (c) 2006 IFI/CLAIMS(R)  File 349:PCT FULLTEXT 1979-2006/UB=20060525,UT=20060518 (c) 2006 WIPO/Univentio	1110			
(c) 2006 The Gale Group  File 122:Harvard Business Review 1971-2006/May (c) 2006 Harvard Business Review  File 148:Gale Group Trade & Industry DB 1976-2006/Jun 01 (c) 2006 The Gale Group  File 275:Gale Group Computer DB(TM) 1983-2006/May 31 (c) 2006 The Gale Group  File 340:CLAIMS(R)/US Patent 1950-06/May 30 (c) 2006 IFI/CLAIMS(R)  File 349:PCT FULLTEXT 1979-2006/UB=20060525,UT=20060518 (c) 2006 WIPO/Univentio	File			
(c) 2006 Harvard Business Review  File 148:Gale Group Trade & Industry DB 1976-2006/Jun 01				
File 148:Gale Group Trade & Industry DB 1976-2006/Jun 01	File			
(c) 2006 The Gale Group  File 275:Gale Group Computer DB(TM) 1983-2006/May 31  (c) 2006 The Gale Group  File 340:CLAIMS(R)/US Patent 1950-06/May 30  (c) 2006 IFI/CLAIMS(R)  File 349:PCT FULLTEXT 1979-2006/UB=20060525,UT=20060518  (c) 2006 WIPO/Univentio				
File 275:Gale Group Computer DB(TM) 1983-2006/May 31  (c) 2006 The Gale Group  File 340:CLAIMS(R)/US Patent 1950-06/May 30  (c) 2006 IFI/CLAIMS(R)  File 349:PCT FULLTEXT 1979-2006/UB=20060525,UT=20060518  (c) 2006 WIPO/Univentio	File			
(c) 2006 The Gale Group File 340:CLAIMS(R)/US Patent 1950-06/May 30 (c) 2006 IFI/CLAIMS(R) File 349:PCT FULLTEXT 1979-2006/UB=20060525,UT=20060518 (c) 2006 WIPO/Univentio				
File 340:CLAIMS(R)/US Patent 1950-06/May 30 (c) 2006 IFI/CLAIMS(R) File 349:PCT FULLTEXT 1979-2006/UB=20060525,UT=20060518 (c) 2006 WIPO/Univentio	File			
(c) 2006 IFI/CLAIMS(R) File 349:PCT FULLTEXT 1979-2006/UB=20060525,UT=20060518 (c) 2006 WIPO/Univentio	T:1-			
File 349:PCT FULLTEXT 1979-2006/UB=20060525,UT=20060518 (c) 2006 WIPO/Univentio	rite			
(c) 2006 WIPO/Univentio	File			
	1110			
	File			
(c) 2006 ProQuest				
File 654:US Pat.Full. 1976-2006/May 30	File	654:US Pat.Ful.	l. 1976-2006/May 30	
(c) Format only 2006 Dialog		(c) Format	only 2006 Dialog	

#### 2/3/1 (Item 1 from file: 15)

DIALOG(R)File 15:ABI/Inform(R)

(c) 2006 ProQuest Info&Learning. All rts. reserv.

02533033 115924022

Stocking strategy for service parts - a case study

Botter, Rene; Fortuin, Leonard

International Journal of Operations & Production Management v20n6 PP:

656-674 2000

ISSN: 0144-3577 JRNL CODE: IJO

WORD COUNT: 6919

#### 2/3/2 (Item 2 from file: 15)

DIALOG(R)File 15:ABI/Inform(R)

(c) 2006 ProQuest Info&Learning. All rts. reserv.

02324583 86067835

Towards the development of an intelligent inventory management system

Kobbacy, Khairy A H; Liang, Yansong

Integrated Manufacturing Systems v10n6 PP: 354-366 1999

ISSN: 0957-6061 JRNL CODE: ING

WORD COUNT: 6085

#### 2/3/3 (Item 3 from file: 15)

DIALOG(R)File 15:ABI/Inform(R)

(c) 2006 ProQuest Info&Learning. All rts. reserv.

01032514 96-81907

Determining reorder points when lead time is random: A spreadsheet implementation

Keaton, Mark

Production & Inventory Management Journal v36nl PP: 20-26 First Quarter

1995

ISSN: 0897-8336 JRNL CODE: PIM

WORD COUNT: 2941

#### 2/3/4 (Item 4 from file: 15)

DIALOG(R) File 15:ABI/Inform(R)

(c) 2006 ProQuest Info&Learning. All rts. reserv.

01004566 96-53959

Using the gamma distribution to model demand when lead time is random

Keaton, Mark

Journal of Business Logistics v16nl PP: 107-131 1995

ISSN: 0735-3766 JRNL CODE: JBL

WORD COUNT: 6166

#### 2/3/5 (Item 5 from file: 15)

DIALOG(R)File 15:ABI/Inform(R)

(c) 2006 ProQuest Info&Learning. All rts. reserv.

00646015 92-60955

Modeling Transportation- Inventory Trade-offs in a Stochastic Setting

Tyworth, John E.

Journal of Business Logistics v13n2 PP: 97-124 1992

ISSN: 0735-3766 JRNL CODE: JBL

WORD COUNT: 6392

#### 2/3/6 (Item 1 from file: 35)

DIALOG(R) File 35: Dissertation Abs Online

(c) 2006 ProQuest Info&Learning. All rts. reserv.

01795601 ORDER NO: AADAA-19936703

PERIODIC REVIEW INVENTORY CONTROL MODEL FOR SLOW MOVING SPARE PARTS (MANUFACTURING)

Author: RAZI, MUHAMMAD ABDULLAH-AL

Degree: PH.D. Year: 1999

Corporate Source/Institution: VIRGINIA COMMONWEALTH UNIVERSITY (2383)

Source: VOLUME 60/06-A OF DISSERTATION ABSTRACTS INTERNATIONAL.

PAGE 2127. 204 PAGES

#### 2/3/7 (Item 1 from file: 75)

DIALOG(R)File 75:TGG Management Contents(R) (c) 2006 The Gale Group. All rts. reserv.

00137527 SUPPLIER NUMBER: 08615860 (USE FORMAT 7 FOR FULL TEXT)

# Proper planning and simulation play a major role in proper warehouse design.

Senko, James M.; Suskind, Peter B.

Industrial Engineering, v22, n6, p34(4)

June, 1990

ISSN: 0019-8234 LANGUAGE: English RECORD TYPE: Fulltext; Abstract

WORD COUNT: 2647 LINE COUNT: 00218

### 2/3/8 (Item 1 from file: 122)

DIALOG(R) File 122: Harvard Business Review

(c) 2006 Harvard Business Review. All rts. reserv.

114105 CONTROL NUMBER: 793060 (USE FORMAT 7 FOR FULLTEXT)

## Managing Physical Distribution for Profit

Herron, David P. - SRI International

HARVARD BUSINESS REVIEW May/Jun 1979, p 121

TRANSLATIONS:

French, Une fonction meconnue: la distribution physique, No. 16 1980, HARVARD L'EXPANSION.

Italian, Quella cosa chiamata distribuzione fisica, No. 6 1980, HARVARD ESPANSIONE.

Japanese, Managing physical distribution for profit, No. 5 1979, DIAMOND HARVARD BUSINESS.

Spanish (Spain), La gestion de la distribucion fisica como potencial de rentabilidad, No. 5 1981, HARVARD DEUSTO BUSINESS REVIEW.

Spanish (Mexico), Como manejar la distribucion de productos en pro de las utilidades, Series 14, BIBLIOTECA DE HARVARD DE ADMINISTRACION DOCUMENT TYPE: HBR Article LANGUAGE: English RECORD TYPE: Abstract Fulltext

WORD COUNT: 6057

## 2/3/9 (Item 1 from file: 148)

DIALOG(R) File 148: Gale Group Trade & Industry DB (c) 2006 The Gale Group. All rts. reserv.

SUPPLIER NUMBER: 18138992 (USE FORMAT 7 OR 9 FOR FULL TEXT) 09647353 A sensitivity analysis of retailer shelf management models.

Borin, Norm; Farris, Paul

Journal of Retailing, v71, n2, p153(19)

Summer, 1995

ISSN: 0022-4359 LANGUAGE: English RECORD TYPE: Fulltext; Abstract

WORD COUNT: 6535 LINE COUNT: 00564

#### 2/3/10 (Item 1 from file: 340)

DIALOG(R) File 340:CLAIMS(R)/US Patent (c) 2006 IFI/CLAIMS(R). All rts. reserv.

10049532 2001-0049690

#### E/METHOD AND APPARATUS FOR MONITORING THE EFFECTIVE VELOCITY OF ITEMS THROUGH A STORE OR WAREHOUSE

Inventors: McConnell Theodore Van Fossen (US); Vaccaro Henry Sebastian (US)

Assignee: Unassigned Or Assigned To Individual

Assignee Code: 68000

Probable Assignee: Standard Analytics LLC

Attorney, Agent or Firm: THE PROCTER & GAMBLE COMPANY PATENT DIVISION,

IVORYDALE TECHNICAL CENTER-BOX 474, 5299 SPRING GROVE AVENUE,

CINCINNATI, OH, 45217, US

	Pι	ublication Number	Kind	d Date	Aŗ	pplication Number	Date
Priority Applic: Provisional Applic:	US	20010049690	A1	20011206	US US	2001827811 2001827811 60-195689 60-196039	

#### (Item 1 from file: 349)

DIALOG(R) File 349: PCT FULLTEXT

(c) 2006 WIPO/Univentio. All rts. reserv.

00848549 \*\*Image available\*\*

#### METHOD AND APPARATUS FOR MONITORING THE EFFECTIVE VELOCITY OF ITEMS THROUGH A STORE OR WAREHOUSE

### PROCEDE ET APPAREIL PERMETTANT DE SURVEILLER LE TAUX DE ROTATION EFFECTIF D'ARTICLES DANS UN MAGASIN OU UN ENTREPOT

Patent Applicant/Assignee:

THE PROCTER & GAMBLE COMPANY, One Procter & Gamble Plaza, Cincinnati, OH 45202, US, US (Residence), US (Nationality)

Inventor(s):

McCONNELL Theodore Van Fossen, 3009 Fairfield Avenue, Cincinnati, OH 45206, US,

VACCARO Henry Sebastian, 164 Monte Vista, Los Alamos, NM 87544, US, Legal Representative:

REED T David (et al) (agent), The Procter & Gamble Company, 5299 Spring Grove Avenue, Cincinnati, OH 45217-1087, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200182170 A2-A3 20011101 (WO 0182170) Application: WO 2001US11392 20010406 (PCT/WO US0111392)

Priority Application: US 2000195689 20000407; US 2000196039 20000407 Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

AE AG AL AM AT (utility model) AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR

CU CZ (utility model) CZ DE (utility model) DE DK (utility model) DK DM

DZ EE (utility model) EE ES FI (utility model) FI GB GD GE GH GM HR HU ID

IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ

NO NZ PL PT RO RU SD SE SG SI SK (utility model) SK SL TJ TM TR TT TZ UA

UG UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English Fulltext Word Count: 27852

### 2/3/12 (Item 1 from file: 654)

DIALOG(R) File 654:US Pat. Full.

(c) Format only 2006 Dialog. All rts. reserv.

0004938551 \*\*IMAGE Available Derwent Accession: 2002-011321

# Method and apparatus for monitoring the effective velocity of items through a store or warehouse

Inventor: Theodore McConnell, INV

Henry Vaccaro, INV

Correspondence Address: THE PROCTER & GAMBLE COMPANY PATENT DIVISION, IVORYDALE TECHNICAL CENTER - BOX 474 5299 SPRING GROVE AVENUE, CINCINNATI, OH, 45217, US

		Publication Number		Kind Date		pplication Number	Filing Date	
Main Patent	US 2001	.0049690	A1	20011206	US	2001827811	20010406	į
Provisional					US	60-195689	20000407	
Provisional					US	60-196039	20000407	

Fulltext Word Count: 33949

## 2/3/13 (Item 2 from file: 654)

DIALOG(R) File 654:US Pat.Full.

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4199832 \*\*IMAGE Available

Derwent Accession: 1997-238362

Utility REASSIGNED

## ${\ensuremath{\mathbb E}}/$ Decision support system for the management of an agile supply chain

Inventor: Huang, Ying, Yorktown Heights, NY

Desiraju, Ramakrishna, North Tarrytown, NY

Begue, Christophe, White Plains, NY

Bakkalbasi, Omer, Mahopac, NY Chan, Lap Mui Ann, Ossining, NY

Bhaskaran, Krishnakumar, Tarrytown, NY

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Krasinski, Raymond J., Suffern, NY Boey, Peter, Scarborough, NY

Assignee: Philips Electronics North America Corporation (02), New York, NY

Philips Electronics North America Corp (Code: 14365)

Examiner: MacDonald, Allen R. (Art Unit: 275) Assistant Examiner: Crecca, Michele Stuckey

# Combined Principal Attorneys: Thorne, Gregory L.

	Publication Number	Kind	Date	Application Number	Filing Date
Main Patent Provisional	US 5953707	 А	19990914	US 97802961 US 60-5860 US 60-8101 US 60-12327 US 60-22787	19970221 19951026 19951030 19960227 19960730

Fulltext Word Count: 49197

?

ntulos

Your SELECT statement is:

s (monte()carlo(10n)poisson()distribution? ?(15n)(forecast? or predict?)(4n)(inventory or inventories)) not <math>py>2001

File Items ----Examined 50 files Examined 100 files Examined 150 files Processing Processing Processing Processing Processing Processing Examined 200 files Examined 250 files Examined 300 files Examined 350 files Examined 400 files Examined 450 files Examined 500 files >>>I/O error in file 768 Examined 550 files Processing

No files have one or more items; file list includes 561 files. One or more terms were invalid in 106 files.

Dialog

Your SELECT statement is:

s ((monte()carlo) and (poisson()distribution) and ((predict? or forecast?)(4n)(orders or inventory or demand))) not py>2001



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Items
                   File
           ----
                    15: ABI/Inform(R) 1971-2006/Jun 06
                    34: SciSearch(R) Cited Ref Sci_1990-2006/May W4
               1
       Examined 50 files
       Examined 100 files
       Examined 150 files
Processing
       Examined 200 files
       Examined 250 files
       Examined 300 files
                   485: Accounting & Tax DB_1971-2006/May W4
       Examined 350 files
       Examined 400 files
       Examined 450 files
       Examined 500 files
>>>I/O error in file 768
       Examined 550 files
Processing
```

3 files have one or more items; file list includes 561 files. One or more terms were invalid in 106 files.

6/3,K/1 (Item 1 from file: 2)

DIALOG(R) File 2:INSPEC

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07552848 INSPEC Abstract Number: C2000-05-7180-013

Title: Decision support for the single-period inventory problem

Author(s): Walker, J.

Author Affiliation: Bus. Sch., Nanyang Technol. Inst., Singapore

Journal: Industrial Management + Data Systems vol.100, no.2 p

Publisher: MCB University Press,

Publication Date: 2000 Country of Publication: UK

CODEN: IMDSD8 ISSN: 0263-5577

SICI: 0263-5577(2000)100:2L.61:DSSP;1-P Material Identity Number: B887-2000-002

Language: English

Subfile: C

Copyright 2000, IEE

Title: Decision support for the single-period inventory problem

Abstract: The development of a decision support tool for the single-period **inventory** problem is presented. The support tool allows a consideration of the following factors: empirical **frequency** distributions, theoretical **probability distribution** functions and managerial probability estimates of total **demand** over the period; piece-wise linear (possibly discontinuous) cost functions. Such functions allow for the...

... measures; and "what-if" analysis on the problem parameters. The support tool, which uses the **Monte** Carlo simulation option of Visual IFPS/Plus, is transparent and constructively simple and thus readily facilitates...

...Descriptors: Monte Carlo methods

Identifiers: single-period inventory problem...

... Monte Carlo simulation option

#### 5/3,K/1 (Item 1 from file: 2)

DIALOG(R) File 2: INSPEC

(c) 2006 Institution of Electrical Engineers. All rts. reserv.

07552848 INSPEC Abstract Number: C2000-05-7180-013

Title: Decision support for the single-period inventory problem

Author(s): Walker, J.

Author Affiliation: Bus. Sch., Nanyang Technol. Inst., Singapore

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Publisher: MCB University Press,

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CODEN: IMDSD8 ISSN: 0263-5577

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Identifiers: single-period inventory problem...

#### 5/3,K/2 (Item 1 from file: 15)

DIALOG(R)File 15:ABI/Inform(R)

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00449588 89-21375

# (R,r) Production/ Inventory Systems

Altiok, Tayfur

Operations Research v37n2 PP: 266-276 Mar/Apr 1989

ISSN: 0030-364X JRNL CODE: OPR

#### (R,r) Production/ Inventory Systems

#### ...DESCRIPTORS: Inventory control

ABSTRACT: In a one-product production—inventory system, a continuous review (R,r) policy is used to control the inventory in the warehouse. The policy indicates that production starts when the stock on hand drops to r and continues until the stock level reaches R. The behavior of the inventory process is studied, and the cost minimizing values of r and R are determined. The production—inventory system is a compound Poisson demand arrival process and a continuous review (R,r) production control policy. Backlogging is allowed to a certain level, and the demand arrival rate depends on the production rate. Measures of performance include: 1. the probability distribution of the inventory level, 2. the average number of switchovers, and 3. the lost sales per unit time. The cost minimizing objective is a function of the probabilities of the inventory process in the steady state. A recursive procedure to calculate the steady state probabilities of the inventory process is developed.

DIALOG(R) File 15:ABI/Inform(R)
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00276288 85-16722

## A Stochastic Approach to Determining Safety Stock: Conclusion

Shelton, Fred Ames

Cost & Management v58n6 PP: 35-40 Nov/Dec 1984

ISSN: 0010-9592 JRNL CODE: RIA

...DESCRIPTORS: Inventory management

...ABSTRACT: well-established statistical procedures. 3. A ''hedge'' can be provided for the inadequacies of the **demand** or lead-time forecast model. The application of joint **probability distributions** for lead-time and **inventory demand rates** is demonstrated in 3 examples that, if understood, can provide a basis for use of the more complex **inventory** models available.

#### 5/3,K/4 (Item 1 from file: 35)

DIALOG(R) File 35: Dissertation Abs Online (c) 2006 ProQuest Info&Learning. All rts. reserv.

01795601 ORDER NO: AADAA-19936703

# PERIODIC REVIEW INVENTORY CONTROL MODEL FOR SLOW MOVING SPARE PARTS (MANUFACTURING)

Author: RAZI, MUHAMMAD ABDULLAH-AL

Degree: PH.D. Year: 1999

Corporate Source/Institution: VIRGINIA COMMONWEALTH UNIVERSITY (2383)

Source: VOLUME 60/06-A OF DISSERTATION ABSTRACTS INTERNATIONAL.

PAGE 2127. 204 PAGES

# PERIODIC REVIEW INVENTORY CONTROL MODEL FOR SLOW MOVING SPARE PARTS (MANUFACTURING)

A periodic review (S, T) **inventory** control model for slow-moving spare parts for a single-echelon **inventory** control system is developed and evaluated using real data from a large manufacturer. Although forecasting-based models are quite realistic for **inventory** control of fast-moving spare parts, managers often have a difficult time determining suitable values...

- ...processing plants. We assume a fixed replenishment lead time, fixed ordering and review cost, linear **inventory** carrying cost and a backorder cost associated with unfilled demand. No assumption regarding the nature...
- ...applied in practice. Our model divides spare parts into several groups based on similarity of **demand** histories and lead times. Instead of using a theoretical **probability distribution**, individual **demand frequencies** for a sample of items in a group are combined to form a single frequency...
- ...show that the proposed (S, T) model provides the manufacturer a better alternative to the **inventory** control model based on commercial enterprise resource planning (ERP) software. A test performed on a...
- ...For the same sample, the proposed model had 36% lower average annual costs related to **inventory** management.

### 5/3,K/5 (Item 2 from file: 35)

DIALOG(R)File 35:Dissertation Abs Online

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01290317 ORDER NO: AAD93-14100

# MODELING MAKE-TO-ORDER MANUFACTURING SYSTEMS WITH JOINT DETERMINATION OF LEAD TIMES AND ORDER ACCEPTANCE RATES

Author: WENG, ZHENGWEN KEVIN

Degree: PH.D. Year: 1992

Corporate Source/Institution: PURDUE UNIVERSITY (0183)

Source: VOLUME 54/01-A OF DISSERTATION ABSTRACTS INTERNATIONAL.

PAGE 246. 107 PAGES

...measures: manufacturing flow times, quoted lead-time reliability (earliness and tardiness), throughput (or demand) rates, **inventory** levels, resource utilization, and expected profits.

The optimal policies for both the manufacturing lead time...

...problem for make-to-order manufacturing systems with lead time-based competition in obtaining customer **orders**. It is shown that although the **probability distribution** of manufacturing flow times depends on the **order** -acceptance **rate** which in turn is a function of the quoted lead time, the earliness cost and...

...class of probability distributions. In contrast to the base-stock quantity in the classical "newsboy" **inventory** problem, the decision variable in the manufacturing lead time control problem is the quoted lead

#### 5/3,K/6 (Item 3 from file: 35)

DIALOG(R)File 35:Dissertation Abs Online (c) 2006 ProQuest Info&Learning. All rts. reserv.

1059718 ORDER NO: AAD89-10045

# SINGLE AND DUAL SOURCING IN STOCHASTIC LEAD TIME INVENTORY MODELS: A COMPARATIVE ANALYSIS

Author: RAMASESH, RANGA VENKATESH

Degree: PH.D. Year: 1988

Corporate Source/Institution: THE PENNSYLVANIA STATE UNIVERSITY (0176)

Source: VOLUME 50/02-A OF DISSERTATION ABSTRACTS INTERNATIONAL.

PAGE 484. 204 PAGES

# SINGLE AND DUAL SOURCING IN STOCHASTIC LEAD TIME INVENTORY MODELS: A COMPARATIVE ANALYSIS

In **inventory** management and control, when lead times are stochastic, a dual-sourcing technique in which the...

...the two techniques. In this dissertation, we formulate mathematical models of one- and two-vendor **inventory** systems under stochastic lead times and demand and examine their optimal total cost performance in...

...single- and multifactor experiments.

We first analyze a simplified base-case model assuming a uniform probability distribution for the lead times and a constant rate of demand. For the two-vendor system, we assume that the lead times for both the vendors...

...vendors. We then progressively relax the assumptions and develop models of more complicated and realistic **inventory** systems. Besides the uniform distribution model, we investigate two additional models with exponentially distributed lead...

#### 5/3,K/7 (Item 1 from file: 88)

DIALOG(R) File 88: Gale Group Business A.R.T.S.

(c) 2006 The Gale Group. All rts. reserv.

05388069 SUPPLIER NUMBER: 61556946

Strategies for integrating lead time and customer-order decisions.

WENG, Z. KEVIN

IIE Transactions, 31, 2, 161

Feb, 1999

ISSN: 0740-817X LANGUAGE: English RECORD TYPE: Fulltext

WORD COUNT: 8729 LINE COUNT: 00738

#### TEXT:

...measures: manufacturing flow times, quoted lead time reliability (earliness and tardiness), throughput (or demand) rates, **inventory** levels, resource utilization, and expected profits. These and other related managerial issues are explored. Our...

... measures: manufacturing flow times, quoted lead time reliability (earliness and tardiness), demand (or throughput) rates, **inventory** levels, and resource utilization. In general, these performance measures and their in terrelationships are of...nine workstation controllers for the next model to be assembled on the system.

The annual inventory carrying cost rate for all inventory is estimated at 22%. The variable production cost for the entire production process is aboutwithout a tremendous amount of inventory -- 30 to 35 inventory turns per year are common. However, for make-to-order items, late deliveries typically run...reasoned qualitatively that there will be some penalty for not considering the impact of the order acceptance rate as well as the quoted lead time on the probability distribution of manufacturing flow time, and consequently on the expected profit, the significance of the profit...Journal of Production Research, Journal of Business Logistics, Management Science, Naval Research Logistics, Production and Inventory Management Journal, and Production and Operations Management.

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(1.) Gilmore, J. and Pine II, B...

... Nineties, Ballantine, New York.

- (7.) Karmarkar, U.S. (1987) Lot sizes, leadtimes and in-process inventories. Management Science, 33, 409-418.
- (8.) Yano, C.A. (...manufacturing systems: analyses and insights, Operations Research (forthcoming).
- (12.) Li, L. (1992) The role of **inventory** in delivery time competition. Management Science, 38, 182-197.
  - (13.) Schwarz, L.B. and Weng...

...DESCRIPTORS: Inventory control

### 5/3,K/8 (Item 1 from file: 122)

DIALOG(R)File 122:Harvard Business Review

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114105 CONTROL NUMBER: 793060 (USE FORMAT 7 FOR FULLTEXT)
Managing Physical Distribution for Profit

Herron, David P. - SRI International

HARVARD BUSINESS REVIEW May/Jun 1979, p 121

TRANSLATIONS:

French, Une fonction meconnue: la distribution physique, No. 16 1980, HARVARD L'EXPANSION.

Italian, Quella cosa chiamata distribuzione fisica, No. 6 1980, HARVARD ESPANSIONE.

Japanese, Managing physical distribution for profit, No. 5 1979, DIAMOND HARVARD BUSINESS.

Spanish (Spain), La gestion de la distribucion fisica como potencial de rentabilidad, No. 5 1981, HARVARD DEUSTO BUSINESS REVIEW.

Spanish (Mexico), Como manejar la distribucion de productos en pro de las utilidades, Series 14, BIBLIOTECA DE HARVARD DE ADMINISTRACION DOCUMENT TYPE: HBR Article LANGUAGE: English RECORD TYPE: Abstract Fulltext

WORD COUNT: 6057

- ...ABSTRACT: reasons for trying to achieve substantial gains include: changes in distribution activities, such as transportation, inventory management, packaging, warehousing, order processing, receiving and shipping, and overall distribution management, which can negatively...
- ...planning based on trade-offs between the two most costly distribution functions, principally transportation and **inventory** -carrying, and by a more rational balancing of **inventory** levels, stockout frequencies, and expediting, distribution managers can achieve substantial and immediate profit improvements in...
- ... filling the anticipated demand whenever possible from the lowest-cost source, (b) summing the individual **inventories** at each warehouse so that the storage space available is not exceeded, and (c) determining...
- ...run, decides how much of each product to make when it is run, and optimizes **inventory** investments and reorder points for each product, taking into account whether company-owned warehouse space...
- ...important reasons for seeking substantial gains are:
  Distribution activities (which for present purposes include transportation, inventory management, packaging, warehousing, order processing, receiving and shipping, and overall distribution management) are closely intertwined...
- ...cutting transportation costs by shifting to a cheaper but slower transport mode will often increase **inventory** levels and warehousing costs. Thus one may inadvertently rob Peter to pay Paul.

Distribution costs and operations involve inherent uncertainties.

Inventory -carrying costs, reordering costs, profit penalties associated with stockouts, and future demand and variability of...

... are quite difficult to estimate accurately.

Distribution costs are often hidden. The cost of carrying inventories in many companies is roughly as high as the operating profits before taxes, yet it...

...determining the effect of mode and shipment size on the overall sum of transport costs, **inventory** -carrying costs, or profit losses from stockouts.

Because of these obstacles, distribution managers often fall...

- ...effect of distribution operations on product sales and annual margin income. Thus many articles on **inventory** management describe how to determine minimum-cost lot sizes and order points to achieve a...R. Sprague, in their examination of supermarket distribution, determined that the most profitable in-stock **inventory** level at a manufacturer's finished-goods warehouse was 99.5% for relatively big-ticket...
- ...is based on explicit profit-maximizing trade-offs among the various distribution functions, principally transportation, **inventory** management, and expediting. Neither this approach nor any other can avoid the difficult estimates ofcosts. Important factors include the network of supply locations, transport modes, orderprocessing times, **inventory** levels, and delivery and expediting frequencies.
- 4. Capital costs associated with distribution, including equipment and facility costs and the cost of carrying **inventory**, should be annualized at an interest rate equal to the opportunity cost of capital for...
- ...substantial, immediate profit improvement in an existing distribution system by a more rational balancing of **inventory** levels, stockout frequencies, and expediting. Then, in the longer term, relocation of distribution facilities and...
- ...time increases to 31 days. The magnitude of the stockout peak depends on how much **inventory** the supply point carries, how frequently it uses expediting to avoid the delay in response...
- ...stockout peak of the customer supply profile, in which the most profitable trade-offs among **inventory** investment, shipping and expediting frequencies, and expected incidence of stockouts are determined. This phase does...
- ...as an explicit alternative to allowing stockouts to occur or to increasing the level of **inventory**. Although various types of expediting are important everyday occurrences in most businesses, many **inventory** planners act as if expediting did not exist, and rarely try to measure the profit...
- ...expediting should not be used.
- It is clear that in either case the investment in **inventory** must be balanced against the required frequency of expediting in the first case and the...
- ...second case. Once the decision on expediting is resolved, a decision on the most profitable **inventory** level must follow.
  - SECTION HEADING: Effects>3 of stockouts>3. Thus it is necessary to...
- ...out of stock (a point of view that is often illogically coupled with restrictions on inventory turnover that make some stockouts unavoidable). Or, more explicitly, a company may decide, say, that a 95% fill rate represents the best balance between stockout frequency and inventory investment. Even more concretely, either the marketing department or customer surveys may help determine the...relatively cheap, it may be more profitable to set lower fill rate goals for the inventory system and resort to frequent expediting when stockouts threaten. Second, even if two items in...
- ...and so forth. Expediting prevents impending stockouts and hence can sere as a substitute for **inventory** stocks. Thus expediting is most profitable when potential **inventory** savings are large, as with products of high unit cost and erratic demand.

Sometimes, of...

...stockouts.

When expediting is profitable, the next step is to determine the best balance between **inventory** investment and the expected frequency of expediting. The important variables are these:

- 1. The demandcost of carrying inventory, based on the annual inventory -carrying charge rate and the unit cost of the item.
  - 5. The difference between the...

...of "safety stock" that can be saved by expediting. (Half or more of the total **inventory** investment in many companies is in the form of safety stock, which is the amount of reserve **inventory** kept to prevent stockouts caused by unpredictable demand spurts before a new shipment arrives. On the average, the **inventory** level when the new shipment arrives is the safety stock.)

Profit-maximizing models can be developed to determine the best expediting policy. For the somewhat simplified case of continuous-review inventory management, lead time demand following a normal probability distribution, constant freight rates, negligible fixed costs of ordening, and the ability to anticipate the need for expediting and...

...standard deviations of demand). The higher the value of the expedite factor, the lower the **inventory** safety stock level at the destination point should be, and, as shown by the upper...

...by the next-higher supply echelon.

This relationship quantifies the sensible practice of keeping low inventories at the destination and frequently expediting items with high unit cost, relatively unpredictable demand, and...

- ...is predictable should still be shipped by the slower, cheaper, and less reliable mode. However, **inventory** levels at the destination should be reduced so that a substantial degree of expediting by...
- ...tier arrangement will often result in substantial savings in the sum of transportation costs and **inventory** -carrying costs compared with costs of using either transportation mode alone.Many commodities now being...
- $\ldots$  by truck. When stockouts threaten, an expedited truck shipment can be made.

Similarly, when the **inventory** levels are properly set, movement by air cargo is profitable for some portion of the...

...higher than the estimated stockout penalty, a company should determine the most profitable balance among **inventory** investment, shipping frequency, and expected gross margin loss from stockouts.

Consider first the trade-off between **inventory** investment and profit penalty from stockouts (see Exhibit V). As expected, the higher the profit

 $\ldots$  the higher should be the fill rate, which in turn requires a higher investment in **inventory** .

However (and this point is often overlooked), if two items have the same stockout penalty...

...reason for this, of course, is that the item with relatively unpredictable demand requires more **inventory** to achieve a given fill rate. Hence the point of maximum profit is at athe sum of the **inventory** -carrying cost and the stockout cost ranged from 7% in excess of the optimum policy...

...determine the most profitable fill rate for an item and feed this result into existing inventory -control programs.)

In my experience, one of the most important advantages of the stockout-penalty...

...rather than mixing the apples and oranges of arbitranly selected fill rates, expediting policies, and inventory -turnover goals. Marketing, manufacturing, and distribution managers can rationally discuss the required input estimates and...

...in profit is a trade-off of stockout costs, transportation costs, and investment in required **inventory** to determine the optimum frequency of resupplying a warehouse or a customer. Frequently, the transportation manager makes this decision on the basis of freight rates, ignoring the effect on **inventory** level, or the **inventory** manager decides on the basis of calculations of economic lot size, ignoring the effect on freight costs.

The best three-way trade-off of stockout cost, transportation cost, and **inventory** investment can be determined for the aggregate flow of multiple products from a supply point...

...or customer. As expected, large, infrequent shipments reduce annual transportation costs but result in higher **inventory** investment, while more frequent but smaller shipments have the opposite effect. Exhibit VI shows typical...

...each item every two weeks (24 times a year) and make a shipment if its **inventory** had been reduced by an unexpected spurt in demand made scheduled partial shipments every two...

...tactical procedures I have described for maximizing PDM profitability concern the most profitable balances among **inventory** investment, expediting action, shipping frequency, and the extent to which stockouts should be permitted to...HEADING: Concluding note. The two most important costs in PDM--those for transportation and carrying **inventories** --are bounding upward at rates greatly in excess of increases in the general price level...

SUBJECTS: \*Distribution systems; \*Profit; \* Inventory control

CITED REFERENCES: ...p. 85.

INVENTORY POLICY...

...1972.

DECISION SYSTEMS FOR INVENTORY MANAGEMENT AND PRODUCTION PLANNING...

...p. 25.

A MANAGER'S GUIDE TO SETTING INVENTORY POLICIES...

... Journal of the American Production and Inventory Control Society...